

L2 ANSWER 1 OF 2 USPATFULL

ACCESSION NUMBER: 2002:40087 USPATFULL
TITLE: Nucleic acid encoding delta-9 desaturase
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	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6350934	B1	20020226
APPLICATION INFO.:	US 1996-679645		19960712 (8)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1994-300726, filed on 2 Sep 1994		

	NUMBER	DATE
PRIORITY INFORMATION:	US 1995-1135	19950713 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	GRANTED	
PRIMARY EXAMINER:	Fox, David T.	
ASSISTANT EXAMINER:	Kubelik, Anne R.	
LEGAL REPRESENTATIVE:	McDonnell Boehnen Hulbert & Berghoff	
NUMBER OF CLAIMS:	11	
EXEMPLARY CLAIM:	2	
NUMBER OF DRAWINGS:	45 Drawing Figure(s); 44 Drawing Page(s)	
LINE COUNT:	8621	

AB The present invention relates to nucleic acid molecules encoding delta 9 desaturase gene, and expression vectors, plant cells, and transgenic plants expressing delta 9 desaturase nucleic acid. The nucleic acid molecules of the present invention can be used, for example, to decrease delta 9 desaturase activity in plant cells, resulting in decreased unsaturated fatty acid production.

DETD . . . sib-pollinations were given the highest priority, however, when this was not possible, cross-pollinations were made using the inbreds CQ806, CS716, **OQ414**, or HO.sub.1 as pollen donors, and occasionally as pollen recipients. Over 715 controlled pollinations have been made, with the majority. . .

DETD . . . had high stearate content (FIG. 36). The reduction was comparable to R0 maize leaves. This reduction was observed in either **OQ414** plants crossed with RPA85-15 pollen or RPA85-15 plants crossed with self or siblings. Therefore, this suggests that the gene encoding. . .

DETD . . . High with High
Cross Leaf Stearate Leaf Stearate Stearate

RPA85-15.06 .times. RPA85-15.12 6 3 33%

RPA85-15.07 self 5 5 50%

RPA85-15.10 self 8 2 20%

OQ414 .times. RPA85-15.06 5 3 38%

OQ414 .times. RPA85-15.11 6 4 40%

L2 ANSWER 2 OF 2 USPATFULL

ACCESSION NUMBER: 2001:231398 USPATFULL

TITLE: Acyl-ACP thioesterase nucleic acids from maize and methods of altering palmitic acid levels in transgenic plants therewith

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	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6331664	B1	20011218
APPLICATION INFO.:	US 1998-64411		19980422 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 1997-45827	19970505 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	GRANTED	
PRIMARY EXAMINER:	Nelson, Amy J.	
LEGAL REPRESENTATIVE:	Stuart, Donald R., Boruki, Andrea T.	
NUMBER OF CLAIMS:	16	
EXEMPLARY CLAIM:	1	
LINE COUNT:	2566	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Genes encoding maize oleoyl-ACP and palmitoyl-ACP thioesterase enzymes have been isolated from maize. These genes, when expressed in a plant, can be used to create transgenic plants having altered palmitic acid oil profiles.

DETD The two plasmids, pGGN61-1 and pGGN62-2, were tested for transient expression in immature zygotic embryos using the proprietary inbred line, **OQ414** (Mycogen Seeds). For testing expression, embryos 12-14 DAP were isolated and cultured on 15Ag10 medium (Chu, C. (1978) The N6. . . .